Mechanism for Precision Timing Assessed Photonic Delay Negative Magneton Discrepancy Gravitometry and Neutrino Wave Detection

2 December 2025
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Introduction

Traditional neutrino detectors are predicated upon measuring spin torque in ultra-cold electrons, usually those of rubidium used as a dopant in gold plating. Changes in the spin orientation of the electrons modify the conductivity of the gold plate as measured by bombardment with single-mode light. This mechanism, although well-tried, is costly to operate and is not practical for applications calling for a mobile neutrino detector. The size and weight of the mechanism and, particularly, the need for large quantities of liquid argon are cost-prohibitive.

This author wrote a paper regarding the possibility of using encapsulated entangled atoms in order to maintain cold temperatures without active cooling beyond the date of manufacture of the capsules (11 July 2023 and 8 August 2025.) Information is garnered from the interior of the insulated capsules through entanglement, making that proposal feasible but the manufacture of the capsules technically complex. As the capsules are small, without the ability to mass-produce the capsules, the approach may be, for the time-being, somewhat impractical (but surely more practical than the large neutrino detectors currently considered to be state of the art.)

This paper will address itself to an innovative new approach which would allow for the indirect measurement of neutrino/gravity waves in a mechanism which is affordable to manufacture using presently available technologies.

Abstract

Following from the hypothesis that quantum magnetism (magnetons) and quantum electricity (neutrinos) will effectively annihilate one-another (they do not truly annihilate, but for our purposes, they disappear from view and I will therefore use the phrase, “effectively annihilate,”) it should be possible to construct a highly sensitive neutrino/gravity wave detector using three readily available components.

The first needed component is a solid-state magnet. The magnet would not need to be much larger or more powerful than a refrigerator magnet, but its physical properties would need to be carefully controlled, including its shape and polarization. Conventional wisdom holds that the repulsive magnetic force projected by the North face of the magnet and the attractive magnetic force of the South face of the magnet will be precisely equal. I propose that these two forces will be equal only in the absence of gravity. In the presence of a gravitational field, some of the magnetons will be annihilated by the quantum gravity. As the magnetons begin their journey at the North face and end at the South face, the difference between the number of magnetons released by the solid-state magnet from the North face and the number

received at the South face can be used to precisely infer the strength of the gravitational field.

The difference between the repulsive force projected by the North pole of the magnet and the attractive force of the South pole would be too subtle to be detected by a piezo-electric mechanism. However, there is a practical means available for quantifying these subtle differences.

Provided the aforementioned precision quality control of the magnet and completely planar surface on each side, a flat, multi-layered “optical coil” can be layered upon the faces of the magnet. A pair of precision miniaturized atomic clocks (ibid. OASIC) can be used to measure the time required for photons to traverse the circuitous optical track on either side of the magnet.

Provided that the environment is vibration-free and insulated from exterior magnetic fields, cyclical discrepancies in the travel time of light through the South Coil relative to the North Coil can be used to infer the existence of a gravity wave.

The magnetism of the North face would slow the light traveling through the coil by a predictable value, provided there is no interference from other sources of magnetism. In the presence of a gravitational field, however, the degree to which light is slowed in proximity to the South face will be measurably less than the North face. A gravity wave associated with electromagnetic emissions or other sources could be predicted to cause a further relative increase in the velocity of light through the South Coil relative to a baseline value.

Conclusion

By maximizing the length of this coil and maximizing the accuracy of the precision chronometers utilized, it would absolutely be possible to build a neutrino detector based upon this principle rather than the principle of measurement of spin torque in an ultra-cold environment.